



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/533,446

07/12/2006

Patrick Boschet

0595-1030

1820

466 7590 11/20/2008

YOUNG & THOMPSON
209 Madison Street
Suite 500
ALEXANDRIA, VA 22314

EXAMINER

WOLLSCHLAGER, JEFFREY MICHAEL

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

11/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,446	Applicant(s) BOSCHET ET AL.	
	Examiner JEFFREY WOLLSCHLAGER	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8,9,13-17 and 21-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8,9,13-17 and 21-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1791

DETAILED ACTION

It is noted for the record that Examiner Wollschlager has assumed responsibility for this application from Examiner Nichols.

Response to Amendment

Applicant's amendment to the claims filed August 25, 2008 has been entered. Claims 8, 9, 13, 14, 16, 17, and 21-31 are currently amended. Claims 1-7, 10-12, and 18-20 have been canceled. Claims 8, 9, 13-17, and 21-31 are pending and under examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13, 14, 21, 22 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 13, 14, 21 and 22, recite the anti stick agent combines two different materials at various weight ranges. As set forth in the claims, these ranges are outside of the ranges set forth in claims 8 and 16. The intended limiting effect of the claims is unclear in view of the amendment to claims 8 and 16. Claim 29 is rejected as a dependent claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1791

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 8-9, 15-17, and 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki et al. (US 5,364,888) in view of Lopes et al. (US 4,681,714).

Regarding Claims 8-9 and 16-17, the stripping composition claimed is summarized below in Table I by weight percent ranges.

Ingredient	Compound	Wt. % ranges
Base Ingredient	Epoxy PDMS	55.5-99.5%
Polymerization Agent	Diaryliodonium Salt	0.5-5.5%
Anti Adhesion Agent	Epoxy PDMS	<=16.7%
Anti Stick Agent	Vinyl Ether	0-22.3%

In addition, the base ingredient and anti adhesion ingredient claimed is the same compound, epoxy polydimethylsiloxane. Therefore, the above weight percentages may be adjusted to combine the base ingredient and anti adhesion agent. The stripping composition based on the base ingredient and anti adhesion ingredient being the same ingredient is summarized below in Table II.

Table II:

Art Unit: 1791

Ingredient	Compound	Wt. % ranges
Base + Anti Adhesion	Epoxy PDMS	72.2-99.5
Polymerization Agent	Diaryliodonium Salt	0.5-5.5%
Anti Stick	Vinyl Ether	0-22.3%

Aoki teaches an organosiloxane release composition (see Claim 1). The composition comprises an organopolysiloxane, polyether, and omium salt (see Claim 1). The organopolysiloxane may be an epoxy polydimethylsiloxane (see column 4 lines 1-7). The polyether may be a vinyl ether (see Claim 1; see also column 4 line 16-63). The omium salt may be a diaryliodonium salt (see column 5 line 11-23). The composition of Aoki is summarized in Table III below by weight percent ranges.

Table III:

Ingredient	Compound	Wt. % ranges
A	Organopolysiloxane	41.7% - 99%
B	Omium Salt	0.01%-16.6%
C	Polyether	0.99%-41.7%

A comparison of Table II and Table III shows that Applicant's claimed amounts of epoxy polydimethylsiloxane, diaryliodonium salt, and vinyl ether overlap with Aoki's ranges of organopolysiloxane, omium salt, and polyether respectively.

Aoki is silent regarding using the coating as a release agent for molds. Lopes teaches coating a mold with a release coating comprising a polydimethylsiloxane, a solvent and a salt (see Title; see also Abstract).

Art Unit: 1791

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to coat a mold with the mixture taught by Aoki because Lopes teaches coating a mold with a release agent increases the efficiency of manufacturing (see column 1 line 24-33).

Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the invention to coat a mold with the mixture taught by Aoki because one of ordinary skill in the art would have been able to carry out such a substitution to achieve the predictable result of improving product release from a mold. "The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727, 82 USPQ2d 1385 (2007).

Regarding Claims 15 and 24, neither Aoki nor Lopes teach impregnating a wipe or cloth with a coating composition. It is well known that a coating may be applied with a porous instrument such as wipe or cloth. For example, shoe polish is routinely applied to shoes with a wipe or cloth. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to impregnate a wipe or cloth with the composition taught by Aoki because applying a composition to a wipe or cloth allows one to easily apply the composition to an article. Further, Aoki teaches applying/impregnating the composition to various articles (col. 5, lines 47-51).

Regarding Claim 25, Aoki teaches the release composition is UV curable (see Abstract).

Regarding Claim 26, Lopes teaches that silicone coating compositions may be cured (polymerized) by applying heat (see column 3 line 31-52).

Regarding Claims 27-28, neither Aoki nor Lopes specifically teach the claimed heat curing conditions. Lopes teaches that silicone coating compositions curing (polymerization) is directly related to temperature and pressure (see column 7 Example 1; see column 7 Table 1).

Art Unit: 1791

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to determine the optimum temperature and time for to heat cure the composition without undue experimentation because Lopes teaches that silicone coating compositions curing (polymerization) is directly related to temperature and pressure (see column 7 Example 1; see column 7 Table 1) "Discovery of optimum value of result effective variable in known process is ordinarily within skill of art." In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Claims 13, 14, 21-23, and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki in view of Lopes as applied to claims 8-9, 15-17, and 23-28 above, and further in view of Eckberg et al. (US 5,650,453).

Regarding Claims 13-14 and 21-22, Aoki teaches every claimed limitation except the claimed concentrations of dodecyl monovinyl ether and 1,4 cyclohexane dimethanol divinyl ether. Eckberg teaches that mixtures of monovinyl and divinyl ethers reduce the viscosity of the coating mixture, which improves the cure rate of the mixture so that faster and more efficient coating may be achieved (see column 6 line 50-63).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to determine the optimum ether mixture without undue experimentation because Eckberg teaches that the mixture of ethers directly affects the cure rate of the coating (see column 6 line 50-63). "Discovery of optimum value of result effective variable in known process is ordinarily within skill of art." In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding Claim 23, Eckberg teach applying the composition on the mold surface on the thickness of a micrometer order (see column 5 line 48-61).

Regarding Claim 29, neither Aoki nor Lopes teach impregnating a wipe or cloth with a

Art Unit: 1791

coating composition. It is well known that a coating may be applied with a porous instrument such as wipe or cloth. For example, shoe polish is routinely applied to shoes with a wipe or cloth. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to impregnate a wipe or cloth with the composition taught by Aoki because applying a composition to a wipe or cloth allows one to easily apply the composition to an article.

Regarding Claim 30, Lopes teaches that silicone coating compositions may be cured (polymerized) by applying heat (see column 3 lines 31-52).

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable Aoki in view of Lopes as applied to claims 8-9, 15-17, and 23-28 above, and further in view of Dmitroff et al. (US 3,321,019), hereafter Dmitroff.

Regarding Claim 31, Aoki in view of Lopes teach every claimed limitation except for uses the mold coated with the release composition to mold a helicopter blade or element. Dmitroff teaches molding a composite fiberglass helicopter blade in a mold (see column 1). Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the invention to mold helicopter blades using the mold and release composition taught by Aoki in view of Lopes because one of ordinary skill in the art would have been able to carry out such a substitution to achieve the predictable result of improving product release from the mold. "The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727, 82 USPQ2d 1385 (2007).

Response to Arguments

Applicant's arguments filed August 25, 2008 have been fully considered, but they are not persuasive. Applicant argues that Aoki fails to suggest its use in a combination with a mold.

This argument is not persuasive. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The examiner notes that the rejection is based upon a combination of references and that Lopes provides the argued limitation and coats the mold with an analogous and similar composition.

Applicant argues that Aoki teaches away from an anti-adhesion modulator or an anti stick agent since Aoki requires self adhesion. This argument is not persuasive. The suggested "self adhesion" of Aoki provides evidence of the composition's effective use as a release material. The "self" adhesion of the composition, as argued, facilitates the compositions reduced adhesion to adhesive surfaces (col. 3, lines 59-62). Said differently, the argued characteristic of the material does not teach away from the claimed invention, but supports the rejection.

Further, applicant argues that the use of adhesion promoters in Aoki teaches away from the invention. This argument is not persuasive. The adhesion promoter is added to promote adhesion to a particular substrate. In the combination, the substrate is a mold. The adhesion promoter is not utilized to promote adhesion to an adhesive substance (col. 3, lines 59-61).

Applicant argues that neither Eckberg nor Dmitroff remedy the deficiencies of Aoki. This argument is not persuasive. As set forth above, the examiner maintains the rejection presents a *prima facie* case and is not deficient.

Art Unit: 1791

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY WOLLSCHLAGER whose telephone number is (571)272-8937. The examiner can normally be reached on Monday - Thursday 6:45 - 4:15, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1791

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. W./
Examiner, Art Unit 1791

November 20, 2008

/Monica A Huson/
Primary Examiner, Art Unit 1791